

Appl. No. 10/710,929
Amdt. dated September 07, 2005
Reply to Office action of July 22, 2005

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in this application:

Listing of Claims:

1 (currently amended): A dual-band antenna, comprising:

- 5 a substrate having a first surface and a second surface that is on the opposite side of
 the substrate from the first surface;
 a transmission line coupled to a ~~OLE_LINK1~~ feeding point ~~OLE_LINK1~~ for
 transmitting RF signals;
 an emitting unit having a first wire and a second wire that are both disposed on the
10 first surface, ~~and the first wire and the second wire are crossed~~ intersecting at
 the feeding point, the emitting unit being disposed at a first edge of the
 substrate; and
 a ground pad disposed on the second surface of the substrate, wherein the ground
 pad comprises a base ~~from the base~~ extending from a second edge of the
15 substrate toward the feeding point, the first and second edges being located at
 opposite sides of the substrate.

2 (original): The dual-band antenna of claim 1 wherein the transmission line is a
 microstrip.

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3 (original): The dual-band antenna of claim 1 wherein the transmission line is a coplanar
 waveguide.

4 (original): The dual-band antenna of claim 1 wherein the transmission line is a coaxial
25 cable.

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5 (original): The dual-band antenna of claim 1 wherein the base of the ground pad is substantially rectangular.

6 (currently amended): The dual-band antenna of claim 1 wherein the ground pad further
5 ~~comprising~~ comprises an extension disposed on the second surface and extending from the base toward [[a]] the first edge of the substrate.

7 (original): The dual-band antenna of claim 6 wherein the extension is adjacent to the emitting unit.

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8 (original): The dual-band antenna of claim 6 wherein the extension of the ground pad is substantially rectangular in shape.

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9 (currently amended): The dual-band antenna of claim 6 wherein the combination of the base and the extension forms an "L" shape.

10 (original): The dual-band antenna of claim 1 wherein the first wire decides the low operation frequency of the dual-band antenna.

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11 (original): The dual-band antenna of claim 1 wherein the second wire is shorter than the first wire and decides the high operation frequency of the dual-band antenna.

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12 (original): The dual-band antenna of claim 1 wherein the second wire is extended upward from the feeding point and bent at some angle, being parallel to one side of the base.

13 (original): The dual-band antenna of claim 1 wherein the first wire is extended upward from the feeding point and bent at some angle, being parallel to one side of the base.

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14 (original): The dual-band antenna of claim 1 wherein the characteristic impedance of the transmission line is 50 Ohms.